

**Trace Gas Measurements From Whole Air Samples  
Collected Over the Antarctic Continent**

L. E. Heidt,<sup>†</sup> J. F. Vedder,\* W. H. Pollock,<sup>†</sup> B. E. Henry,<sup>†</sup> and R. A. Lueb<sup>†</sup>

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**ABSTRACT**

Whole air samples collected aboard both the NASA DC-8 and ER-2 aircraft as part of the Airborne Antarctic Ozone Experiment (AAOE) were analyzed in a field laboratory set up at Punta Arenas, Chile, in August and September, 1987. Mixing ratios obtained from gas chromatographic analyses of these samples are presented for N<sub>2</sub>O, CFCl<sub>3</sub>, CF<sub>2</sub>Cl<sub>2</sub>, C<sub>2</sub>F<sub>3</sub>Cl<sub>3</sub>, CH<sub>3</sub>CCl<sub>3</sub>, CCl<sub>4</sub>, CH<sub>4</sub>, and CO. Variations in the mixing ratios of these gases along the individual flight paths of the aircraft are used as tracers to indicate the history of air masses over and near the Antarctic continent.<sup>(a)</sup>

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<sup>†</sup> National Center for Atmospheric Research

\* NASA Ames Research Center

<sup>(a)</sup> Data analysis is still underway; this abstract will be expanded upon completion. For this reason we would prefer a poster session.